

## ABSTRACT OF THE DISCLOSURE

A method for manufacturing a flexible MEMS transducer includes forming a sacrificial layer on a flexible substrate, sequentially depositing a membrane layer, a lower electrode layer, an active layer, and an upper electrode layer on the sacrificial layer by PECVD, sequentially patterning the upper electrode layer, the active layer, and the lower electrode layer, depositing an upper protective layer to cover the upper electrode layer, the lower electrode layer, and the active layer, patterning the upper protective layer to be connected to the lower electrode layer and the upper electrode layer, and then depositing a connecting pad layer and patterning the connecting pad layer to form a first connecting pad to be connected to the lower electrode layer and a second connecting pad to be connected to the upper electrode layer; and patterning the membrane layer to expose the sacrificial layer and removing the sacrificial layer.